

WHAT IS CLAIMED IS:

1. An optical pickup for applying a reading laser beam to an optical disc and for detecting a returning laser beam reflected from said optical disc, said optical pickup comprising:

a two wavelength laser having first and second sources to emit first and second laser beams, respectively, for alternatively applying said first laser beam or said second laser beam to said optical disc as said reading laser beam, said first and said second laser beams having optical axes parallel to a first direction and being different from each other in wavelength,

a polarizing beam splitter disposed on a side of the first direction against said two wavelength laser for partially passing or reflecting said reading laser beam from said two wavelength laser to lead said reading laser beam to said optical disc and for partially reflecting or passing said returning laser beam formed by reflecting said reading laser beam with said optical disc to lead said returning laser beam in a second direction different from said first direction, and

a photo detector disposed on a side of the second direction against said polarizing beam splitter and having a predetermined photo sensing area pattern for detecting said returning laser beam traveling in the second direction from said polarizing beam splitter regardless of whether the returning laser is originated from the first laser beam or the second laser beam.

2. An optical pickup as claimed in claim 1, said optical pickup further comprising a grating disposed between said two wavelength laser and said polarizing beam splitter for dividing said reading laser beam into three divided laser beams, wherein said photo detector has three photodiodes which corresponds to said divided three laser beams, respectively, and which form said photo sensing area pattern.

FOIb0-30252300



3. An optical pickup as claimed in claim 2, at least one of said photodiodes having first and second photo sensing areas, wherein said first photo sensing area is used for receiving one of said three divided beams originated from said first laser beam while said second photo sensing area is used for receiving one of said three divided beams originated from said second laser beam.

4. An optical pickup as claimed in claim 3, wherein said first sensing area includes a portion in common with said second sensing area.

5. An optical pickup as claimed in claim 4, wherein each of said first and said second photo sensing areas serves as a fourfold photodiode.

6. An optical pickup as claimed in claim 3, wherein each of said first and said second photo sensing areas serves as a fourfold photodiode.